AMENDMENTS TO THE SPECIFICATION:

Please delete the two paragraphs which are located on page 8, lines 22-27. The two paragraphs begin "Figure 5" and "Figure 6", respectively.

Please replace the paragraph beginning on page 9, line 34, with the following amended paragraph.

The free sulfhydryl groups of modified protein and fractions thereof provide several types of protective effects in food products and for example in pet foods. Said proteins act as antioxidants and as a result of the interchange the protein toxins of plants or microbes containing disulfide bonds will loose their toxicity. Further the modified proteins prevent the formation of the compounds formed at the beginning of the Maillard reaction, such as Amadori compound, and the formation of lysinoalanine and neutralize e.g. acryl amide and other acryl derivatives (Figures 2, 3, and ~~4, 5 and 6~~).

Please replace the paragraph beginning on page 10, line 24, with the following amended paragraph.

The functional and other properties of the end products may be affected by the degree of the modification i.e. by the ratio of the amount of cleaved disulfide bonds to the disulfide bonds in the protein. According to the purpose and aim of the use a suitable amount of free SH groups may be left, since SH groups act as antioxidants, neutralize toxic protein compounds from plants and microbes by interchange modification and for example acryl amide by reacting with the double bond thereon (Friedman, M., J. Agric. Food Chem. 42 (1994) 3-20) ~~(Figure 6)~~. In addition the free SH groups prevent chemical and enzymatic browning and they also conjugate, detoxify and neutralize xenobiotics e.g. aflatoxin produced by mold. They also bind nitrite, chelate oxidizing Cu^{2+} and Fe^{2+} ions and toxic As^{3+}, Cd^{2+}, Co^{3+}, Hg^{2+}, Pb^{2+} and Se^{2+} ions. With a protein having free SH groups it is possible to turn food product into a functional or

health promoting product, which was discovered in the present invention. The free SH groups have also therapeutic properties, such as healing of the damages in the mucous membrane of digestive tract caused by alcohol (Loguercio C. et al. Gut 34 (1993) 161-165).

Please replace the paragraph beginning on page 12, line 13, with the following amended paragraph.

The composition of modified whey protein is equal to unmodified whey protein. In the modification part of the disulfide bonds are cleaved and they have formed free SH groups. In modified whey protein the amount of free SH groups is generally about 65-85 [[%]] µmol/g protein, preferably about 75 µmol/g protein, as in the examples below.